

*SID Inspections* will be measured and paid in units of each. *SID Inspections* will be measured as one per pier. The contract unit price for *SID Inspections* will be full compensation for inspecting holes with the SID the first time. No additional payment will be made for subsequent inspections of the same hole.

The Contractor is responsible for any damage to the SID equipment due to the Contractor's fault or negligence. Replace any damaged equipment at no additional cost to the Department.

*SPT Testing* will be measured and paid in units of each. *SPT Testing* will be measured as the number of standard penetration tests performed.

*CSL Testing* will be measured and paid in units of each. *CSL Testing* will be measured as one per pier. The contract unit price for *CSL Testing* will be full compensation for performing initial CSL testing and providing CSL reports. Subsequent CSL testing of and CSL reports for the same pier will be considered further investigation. No separate payment will be made for CSL tubes. CSL tubes including coring for inaccessible tubes and grouting will be incidental to the contract unit prices for drilled piers.

No payment will be made for stuck temporary casings that cannot be removed from drilled pier excavations or additional drilled pier length and reinforcing steel required due to temporary casings that remain in excavations. No payment will be made for PIT. No payment will be made for further investigation of defective piers. Further investigation of piers that are not defective will be paid as extra work in accordance with Article 104-7. No payment will be made for remediation of unacceptable drilled piers or post repair testing.

Payment will be made under:

| <b>Pay Item</b>                                    | <b>Pay Unit</b> |
|--|-----------------|
| ____ Dia. Drilled Piers in Soil                    | Linear Foot     |
| ____ Dia. Drilled Piers Not in Soil                | Linear Foot     |
| ____ Dia. Drilled Piers                            | Linear Foot     |
| Permanent Steel Casing for ____ Dia. Drilled Piers | Linear Foot     |
| SID Inspections                                    | Each            |
| SPT Testing  | Each            |
| CSL Testing  | Each            |

## SECTION 412

### UNCLASSIFIED STRUCTURE EXCAVATION

#### 412-1 DESCRIPTION

Excavate any material not classified as foundation excavation, box culvert excavation or channel excavation whose removal is required for the construction of bridges, retaining walls of reinforced concrete or reinforced masonry, arch culverts and box culverts without floor slabs, and which is classified as unclassified structure excavation in the plans, in accordance with the contract or as directed. Excavate, blast, brace, shore, provide sheeting and cribbing, backfill, haul and dispose of materials.

Do not deposit excavated materials, nor construct earth dikes or other temporary earth structures, in rivers, streams or impoundment or so near to such waters that they are carried into any river, stream or impoundment by stream flow or surface runoff.

Dispose of all timber, stumps and debris in accordance with Article 200-6.

#### 412-2 PRESERVATION OF CHANNEL

Unless otherwise required by the contract, do not excavate in stream channels. Do not disturb the natural stream bed adjacent to the structure without permission.

Do not place material in a stream without approval. Remove materials placed within the stream area and leave the stream in its original condition, unless otherwise permitted.

## Section 414

### 412-3 UTILIZATION OF EXCAVATED MATERIAL

Use and place suitable excavated material in accordance with Articles 410-7 and 410-8.

Notify the Engineer a sufficient time before beginning the excavation so measurements may be taken of the undisturbed ground.

### 412-4 MEASUREMENT AND PAYMENT

The price and payment below will be full compensation for all items required to complete unclassified structure excavation including, but not limited to, those items contained in Article 412-1.

*Unclassified Structure Excavation at Station \_\_\_\_* will be paid at the contract lump sum price.

Payment will be made under:

| Pay Item  | Pay Unit |
|---|----------|
| Unclassified Structure Excavation at Station ____ | Lump Sum |

## SECTION 414

### BOX CULVERT EXCAVATION

#### 414-1 DESCRIPTION

Excavate all material necessary for the construction of box culverts with floor slabs in accordance with the contract or as directed. Excavate, blast, drain and divert water, bail, pump, brace, shore, provide sheeting, cribbing, cofferdams, culvert foundation conditioning, subsurface drainage and drawings; backfill, haul and dispose of materials.

Do not deposit excavated materials, nor construct earth dikes or other temporary earth structures in rivers, streams or impoundment or so near to such waters that they are carried into any river, stream or impoundment by stream flow or surface runoff. As an exception to the above, obtain written approval for the use of confined earth materials in cofferdams for structure foundations.

#### 414-2 MATERIALS

Refer to Division 10.

| Item                             | Section |
|----------------------------------|---------|
| Foundation Conditioning Material | 1016    |
| Stone, No. 78M                   | 1005    |
| Subdrain Fine Aggregate          | 1044-1  |

#### 414-3 FOUNDATION EXCAVATION

Notify the Engineer a sufficient time before beginning the excavation so measurements may be taken of the undisturbed ground. Do not disturb the existing ground at the culvert site without permission.

Where necessary for safety, slope, shore, brace or protect by cofferdams the foundation openings in accordance with State and local safety standards. Perform foundation excavation and related work in such sequence that no portion of the culvert will be endangered by subsequent operations. Protect completed portions of a culvert from blasting.

Remove and dispose of boulders, vegetative matter and any other objectionable material.

Notify the Engineer after excavating each foundation. Do not place any concrete until obtaining approval of the excavation depth, the character of the foundation material and permission to proceed.

Take special care not to disturb the bottom of the excavation until immediately before placing reinforcing steel and concrete.